

EX. 11.

EXHIBIT 11

NDA LOG

IND/NDA/DMF#: 20-130 NDA Doc Type: FDA CORRESPONDENCE 10/11/96 Page 1

SubType: NDA

CI#: 376 Sub Date: 12/27/90

Generic: Appr Date:

Product Name: Estrostep Tablets

| Barcode | Ser/ Ref# | Date To: From: | RE/ Contents/Report No./ | Report Title/ Report No. |
|---------|--------------|----------------------|--|-----------------------------|
| B04551 | 1 | Thu, Dec 27, 1990 | Initial NDA (Volumes 1.1 - 1.63) | |
| | | | Item 1: Table of Contents. Item 2: Comprehensive Summary. Item 3: Chemistry, Manufacturing and Controls. Item 4: Samples, Methods and Labeling. Item 5: Item 6: Human Pharmacokinetics and Bioavailability. Item 7: Item 8: Clinical Data. Item 9: Item 10: Statistical Data. Item 11: Case Report Tabulations. Item 12: Case Report Forms. Item 13: Patient Information. (1) Research report submitted. Refer to Research Report list for RR#, date, author and title. | |
| B04602 | | Thu, Jan 03, 1991 | Letter From FDA Acknowledging Receipt of NDA (NDA 20-130) | |
| | | | Re: Acknowledgement of receipt of NDA n 28-Dec-90; Number 20-130 assigned. | |
| | | J. Short | | |
| B04602 | 2 | Fri, Feb 08, 1991 | Letter Re: Amendment to Estrostep NDA Items 3 & 4 | |
| | | S. Sobel | CI-376 | |
| | | | Re: Amendment to Items 3 and 4 of the Estrostep NDA, information enclosed. | |
| B04602 | | Thu, Mar 14, 1991 | Letter Re: Pending New Drug Application for Estrostep-21 | |
| | | | CI-376 | |
| | | | Re: Enclosed copy of the minutes for the fertility and maternal health drugs advisory committee; the committee discussed family health international's proposal to standarize and simplify the patient directions for use. | |
| | | S. Sobel | | |
| B04602 | 3 | Thu, Mar 28, 1991 | Letter Re: Amendment | |
| | | S. Sobel | CI-376 | |
| | | | Re: Attached information requested by Dr. Rarick on 20-Mar-91. | |

IND/NDA/DMF#: 20-130 NDA Doc Type: FDA CORRESPONDENCE 10/11/96 Page 2

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| Barcode | Ser/ Ref# | Date To: From: | RE/ Contents/Report No./ | Report Title/ Report No. |
|---------|--------------|--------------------------------|---|-----------------------------|
| B04603 | | Fri, Apr 19, 1991 G. Turner | Letter Re: Request of 17-Apr-91 Re: Per your request of Apr 17, 1991, attached is a copy of clinical Protocol 376-364 and three volumes of case report forms (CRF's) from Estrostep (NDA 20-130). Volume I contains cover letter and PR. 376-364. Volume II contains the CRF's from Site 3, every tenth patient. Walter Schoen, M.D. Volume III contains the CRF's from Site 5, every fifteenth patient. Charles Veale, M.D. Volume IV contains the CRF's from Site 6, every fifteenth patient. James Geil, M.D. Each volume is tabbed according to patient number. If you have any questions, please feel free to call ----- | |
| B04602 | 4 | Fri, Apr 19, 1991 S. Sobel | Letter Re: Case Report Forms Re: For your information and files attached is a copy of the cover letter sent to Dr. G. Turner of the FDA's divisional scientific investigations, clinical investigations branch. We have supplied Dr. Turner with case report forms for Site 3, 5 and 6 of the Estrostep clinical study 376-364. If you have any questions, please contact me. | |
| B04605 | 5 | Mon, Apr 22, 1991 S. Sobel | Letter Re: Amendment to Estrostep NDA Item 3 Re: Reference is made to our new drug application (NDA #20-130) for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on December 27, 1990. Dr. Martin Benett of your division, in a phone conversation with Dr. Sean Brennan (Parke-Davis) on April 11, 1991, requested the addresses of the manufacturing facilities for the drug substances, norethindrone acetate and ethinyl estradiol. We are amending the following to Item 3 of the NDA. As noted in the attached letters from the suppliers, the addresses are: See attached; Continued - see central file copy. | |
| B04605 | 6 | Fri, Apr 26, 1991 S. Sobel | Letter Re: 4-Month Safety Update (Volumes 3.1 - 3.2) Re: Attached is the 4-month safety update for the Estrostep NDA 20-130. The original integrated summary of safety summarized data from one clinical pharmacology study (376-372) and on clinical study (376-364), through a cut-off date of March 28, 1990. The safety update summarizes the safety data from 2 clinical pharmacology studies (376-372 and 376-376) and 2 clinical studies (376-364 and 376-369). Additional safety data in 228 subjects from one ongoing clinical study (376-374) were also reviewed for serious adverse events and withdrawals due to adverse events. This safety update summarizes safety information collected through the cut-off date of 02-Feb-91. If you have questions, etc. ----- | |
| | | M. Taylor | | |

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| B04605 | 7 | Thu, May 16, 1991 | Letter Re: Amendment to Estrostep NDA Item 3 | |
| | | S. Sobel | Re: Reference is made to our NDA 20-130 for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on Dec. 27, 1990. Enclosed within is an amendment to Item 3 of the Estrostep NDA. As described in the Dec. 27, 1990 cover letter to the NDA, and as agreed in a Oct. 26, 1990 discussion with Dr. Yuan Yuan Chiu of your division, updated stability data on full production scale lots are to be submitted to the NDA. This amendment contains the six month stability reports for the following full scale production lots: Continued - see central file copy. | |
| | | S. Brennan | | |

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| B04605 | 8 | Wed, Jun 12, 1991 | Letter Re: Response to FDA Request for Information | |
| | | S. Sobel | Re: Reference is made to our new drug application (NDA 20-130) for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on December 27, 1990. In response to a telephone request by Dr. Martin Bennett of your division (11-Jun-91), we are amending Item 3 of the NDA to clarify the description of the PVC blister material described on P. 159 of Item 3 (Volume 1.2). The blister package material is described as "colendered polyvinyl chloride." The word "colendered" is a typographical error which should be "calendered". Calendered polyvinyl chloride describes the process used to make the blister material. The process of forming sheets of polyvinyl chloride by pressing the material between rollers or plates is referred to as calendering. Continued - see central file copy. | |
| | | S. Brennan | | |

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| B04605 | | Wed, Jun 19, 1991 | Letter Re: Promotion of Oral Contraceptive | |
| | | M. Taylor | Re: This letter is intended to provide information regarding the promotion of oral contraceptive drug products. It was developed jointly between the divisions of metabolism and endocrine drug products and drug marketing, advertising, and communications and should be considered informal guidance regarding acceptable promotion for these products at this time. This letter has been sent to all applicant holders for oral contraceptive products. Continued - see central file copy. | |
| | | S. Sobel | | |

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| B04605 | 9 | Tue, Jun 25, 1991 | Letter Re: Research Report Page Corrections | |
| | | S. Sobel | Re: The following research report was submitted to the original NDA on 27-Dec-90. A Single-Dose Bioavailability Study of Market-Image and Estrostep 1/35 Tablets Currently Being Used in Clinical Trials and Market-Image Tablets Prepared as a Suspension in Water: Protocol 376-372-0" Attached are corrected pages for the above report. The clinical tables 14-16 in Appendix 4 have been replaced due to minor corrections. As a result, please replace pages 341-404 of Research Report No. 764-01538. These corrections have no significant impact on study results. | |
| | | M. Taylor | | |

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| B04605 | | Wed, Jul 24, 1991 | Letter Re: Identified Deficiencies in Application | | |
| | I. Martin | | Re: Reference is made to your pending new drug application, for Estrostep-21 (norethindrone acetate and ethinyl estradiol) tablets and Estrostep-28 (norethindrone acetate and ethinyl estradiol tablets and ferrous fumarate tablets). Although we have not completed our review of your application, we have identified certain deficiencies in the application and request that you provide the following information: 1. A copy of the patient package insert (PPE) must be submitted, and the physician insert (prescribing information: PPI) must include a reproduction of the PPI. All labeling pieces must include the issue date and the manufacturer's name and address. The established name must accompany the proprietary name as required in 21 CFR 201.10(G). Continued - see central file copy. | | |
| | S. Sobel | | | | |

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| B04606 | 10 | Thu, Aug 22, 1991 | Letter Re: New Drug Application | | |
| | S. Sobel | | Re: Reference is made to your letter of 24-Jul-91 regarding our new drug application for Estrostep. Please find attached 5 copies of the physician insert (PI), patient package insert (PPI) and patient brief summary. These documents have now been typeset and include the issue date and manufacturer name and address. The established name has been added to accompany the proprietary name as required in 21 CFR 201.10(G). The PPI was submitted in draft format in the NDA in Item 4, samples, methods and labeling, Volume 1.3. We are currently in the process of revising the 21 and 28 day blister package labels to comply with the requirement in which the established name must be no less than half the height of the proprietary name. Copies will be submitted shortly. Continued - see file copy. | | |
| | M. Taylor | | | | |

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| B04606 | | Fri, Sep 06, 1991 | Minutes of FDA Meeting | | |
| | | | Date: 31-Jul-91 | | |
| | | | Switch of oral contraceptives to OTC status. | | |

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| B04606 | | Fri, Sep 20, 1991 | Letter Re: Summary and Reports on Disk | | |
| | J. Hunt | | Re: As requested by you on 16-Sep and E. Galliers on 18-Sep, attached are the disks for the following portions of the Estrostep NDA. 1) Section 6.1. Summary of the human pharmacokinetics of norethindrone acetate and ethinyl estradiol. 2) Section 6.3. Report: (See file copy) 3) Section 6.3. Report: (See file copy) The disks are in Wordperfect 5.1 and contain primarily the text portion of the summary and reports. This information is identical to what was submitted as hard copy therefore this letter/disks have not been submitted to the NDA. The additional comparison document and reports which were presented on 16-Sep will be submitted to the division of Metabolism/Endocrine with a desk copy and Wordperfect disk copy to you. | | |
| | M. Taylor | | | | |

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|---------|--------------|----------------------|---|--------------------------|
| B04606 | 11 | Mon, Sep 23, 1991 | Letter R: Life Table Calculations | |
| | | M. Ponnappalli | Re: Please find attached the life table calculations requested by you on 16-Sep-91. This information will be part of a submission to the division of Metabolism/Endocrine. Questions call --- | |
| | | M. Taylor | | |
| B04606 | 12 | Wed, Oct 02, 1991 | Letter Re: Amendment No. 4 | |
| | | S. Sobel | Re: Reference is made to our pending NDA 20-130 for Estrostep and our meeting of 16-Sep-91 with your division. Enclosed is the additional information on Estrostep as agreed to at our meeting. We have updated the pregnancy and adverse event charts and summaries distributed at the meeting, with new information. This document is divided into the following 4 sections. 1) Pharmacokinetics - see file copy. 2) Product comparison - see file copy. 3) Pregnancies - see file copy. 4) Adverse events - see file copy. The formulation and process used to manufacture Estrostep for the clinical study 376-364 is the same as what we intend to use to manufacture tablets for marketing. Continued - see file copy. | |
| | | M. Taylor | | |
| B04606 | 13 | Fri, Oct 18, 1991 | Letter Re: Additional Information Requested | |
| | | S. Sobel | Re: Please find attached additional information requested of me by Dr. R. Velagapudi, division of Biopharmaceutics, during a discussion on 16-Oct-91. Questions call ----- | |
| | | M. Taylor | | |
| B04606 | 14 | Mon, Oct 28, 1991 | Letter Re: Additional Information | |
| | | S. Sobel | Re: Please find attached the additional information requested by Dr. R. Velagapudi, division of Biopharmaceutics, by telephone on 21, 22 and 24-Oct-91. These responses were faxed to Dr. Velagapudi on 23 and 25-Oct-91. Question call ----- | |
| | | M. Taylor | | |
| B04606 | | Wed, Nov 06, 1991 | Changes in Preclinical and Clinical | |
| | | I. Martin | In 11/89 DMEDP wrote to current manufacturers of oral contraceptives describing changes in the preclinical and clinical testing requirement for steroidal contraceptives based in part on recommendations of the world health organization and FDA's Advisory Committee for Fertility and Maternal Health Drugs. | |
| | | S. Sobel | | |

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| B04606 | 15 | Thu, Nov 07, 1991 | Letter Re: Estrostep Labels | | |
| | | S. Sobel | Re: In response to your letter of 24-Jul-91 requesting copies of each (21 and 28 day packages) blister package configuration (label) in which the established name is no less than half the height of the proprietary name as required in 21 CFR 201.10(G), we provide the attached corrected configurations. Also requested was a potency statement on the label, if space permits. Space on the label does not permit a potency statement. Thirteen copies of the final printed labels are submitted as 7 mounted copies and 6 unmounted copies divided into 3 copies of each in 2 envelopes as requested by the division of Metabolism and Endocrine drug products. Questions call ----- | | |
| | | M. Taylor | | | |
| B04606 | | Mon, Nov 25, 1991 | FDA Minutes of Our 16-Sep-91 Meeting on Estrostep | | |
| B04606 | 16 | Tue, Nov 26, 1991 | Letter Re: Update to Estrostep NDA Item 3 | | |
| | | S. Sobel | Re: Reference is made to our NDA (20-130) for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on 27-Dec-90. Enclosed as Attachment 1 is an update to Item 3 of the Estrostep NDA. As described in the 27-Dec-90 cover letter to the NDA, and as agreed in a 26-Oct-90 discussion with Dr. Yuan Yuan Chiu of your division, updated stability data on full production scale lots are to be submitted to the NDA. Attachment 1 contains the 9 and 12 month stability reports for the full scale production lots. The 08-Feb-91 amendment contained three month data and the 16-May-91 amendment contained the six month data for these lots. Continued - see file copy. | | |
| | | S. Brennan | | | |
| B04606 | | Mon, Dec 09, 1991 | Minutes of FDA Meeting | | |
| | | | Date: 16-Sep-91 | | |
| | | | Minutes for internal purposes only. No minutes have been or will be submitted to the FDA as we committed to provide all the information requested at the meeting in the amendment. This amendment was submitted on 02-Oct-91. | | |
| B04606 | | Thu, Dec 12, 1991 | Minutes of FDA Meeting | | |
| | | | Date: 04-Dec-91 | | |
| | | | FDA meeting to discuss proposal for a manufacturing process change for this unapproved product and the data requirements to support the change, especially with respect to bioequivalence to the product used in the clinical trials and to be marketed. | | |

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| B04607 | 18 | Fri, Dec 20, 1991 | Letter Re: Safety Update | |
| | | S. Sobel | Re: Attached is a safety update for the Estrostep NDA 20-130. The original integrated summary of safety summarized data from one clinical pharmacology study (376-372) and one clinical study (376-364), through a cut-off date of 28-Mar-90. The 4-month safety update (ref #6) submitted 26-Apr-91 summarized the safety data from two clinical pharmacology studies (376-372 and 376-376) and three clinical studies (376-364, 376-369, 376-374). Continued - see file copy. | |
| | | M. Taylor | | |
| B04607 | 17 | Sat, Dec 21, 1991 | Letter Re: Amendment 5 | |
| | | S. Sobel | Re: Reference is made to our pending NDA 20-130 for Estrostep, our meeting of 04-Dec-91 with your division and the division of Biopharmaceutics, and a telecommunication between Mary Taylor and John Hunt of the division of Biopharmaceutics on 05-Dec-91. Attached is the following information. 1) Background information on Biopharmaceutics review of NDA; 2) Dissolution - continued see file copy. 3) Pharmacokinetics - continued see file copy. 4) Revised manufacturing process and batch records Continued - see file copy. Questions contact ----- | |
| | | S. Brennan | | |
| B04607 | | Mon, Jan 13, 1992 | Letter Re: Additional Days for Review | |
| | | I. Martin | Re: Reference is made to your pending NDA for Estrostep-21 tablets and Estrostep-28 estradiol tablets and ferrous fumarate tablets. We also refer to the 21-Dec-91, amendment to your NDA received by FDA on 23-Dec-91. We consider your amendment a major amendment under 21 CFR 314.60 and we have determined that 120 additional days will be required for its review. The new due date is 29-May-92. Questions contact Ms. Enid Galliers. | |
| | | S. Sobel | | |
| B04607 | 19 | Wed, Feb 12, 1992 | Letter Re: Additional Information | |
| | | S. Sobel | Re: Please find attached additional information requested by Dr. R. Velagapudi, division of Biopharmaceutics, by telephone on 10-Feb-92. These responses were faxed to Dr. Velagapudi on 12-Feb-92. Questions contact ----- | |
| | | M. Taylor | | |

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| B04607 | 20 | Fri, Mar 13, 1992 | S. Sobel | Letter Re: Additional Information Re: On 02-Mar-92, Dr. R. Velagapudi from the division of Biopharmaceutics requested additional information on the dissolution method for Estrostep. Our response to this request is summarized below. A copy of this letter was transmitted to Dr. Velagapudi by telecopy on 13-Mar-92. Dissolution of Estrostep tablets is performed in 0.1 N hydrochloric acid containing 0.06% sodium lauryl sulfate. Due to the potential for hydrolysis of norethindrone acetate (NA) to norethindrone and degradation of ethinyl estradiol (EE), studies were performed to characterize the stability of both NA and EE in the dissolution medium. Continued - see file copy. |
| | | | S. Brennan | |
| B04608 | 21 | Thu, Apr 16, 1992 | S. Sobel | Letter Re: Response to Request for Information Re: Please find attached additional information requested by Ms E. Galliers for the division of Biopharmaceutics by telephone on 24-Feb and by fax on 10-Apr-92. A. Final report for Protocol 376-378. A draft report for Protocol 376-378 was submitted 2-Oct-91. The complete report is now available. Only minor editorial change have been made in the report. No sample reanalysis was done. B. Update clinical pharmacology section of labeling (continued - see letter) C. Multiple dose study protocol (Continued - see letter) |
| | | | M. Taylor | |
| B04610 | 22 | Mon, Apr 20, 1992 | S. Sobel | Letter Re: Amendment 4 Revisions Re: Reference is made to our pending NDA 20-130 for Estrostep and our submission of 2-Oct-91, Amendment 4. Upon further examination of the data for studies 376-364 and 376-369, it was discovered that two errors were made and reported in the amendment. In the 376-364 clinical study there was an error in reading and reporting of the confidence intervals for the Pearl Index for Estrostep and Loestrin. The 97.5% bound was given as the lower bound for Loestrin and the upper bound for Estrostep. Tab 1 contains the corrected page and for your reference, the original page as it was submitted 2-Oct-91. Tab 1: Pregnancies Tab 2: Serum estradiol and progesterone data clinical study 376-369 Continued - see file copy. |
| | | | M. Taylor | |
| B04610 | 23 | Tue, May 05, 1992 | S. Sobel | Letter Re: Response to Request for Information Re: Reference is made to our pending NDA 20-130 for Estrostep, our letter of 13-Mar-92 (reference No. 20) and your fax of 24-Apr-92 regarding the overall recommendation from the division of Biopharmaceutics. In our letter of 13-Mar-92, we committed to analyze dissolution samples within two hours of sampling. We will evaluate other dissolution medium to determine if the stability of the two drugs, especially norethindrone acetate, can be improved. If a medium is found in which the stability of the two compounds is enhanced, we will discuss our results with the agency. The dissolution medium and specifications will not be changed without prior approval by FDA of an NDA supplement. Questions contact ----- |
| | | | M. Taylor | |

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| B04610 | 24 | Thu, Jun 11, 1992 | Letter Re: Safety Update | | |
| | | S. Sobel | Re: Following is a summary of the safety information for Estrostep NDA 20-130. The original integrated summary of safety summarized data from one clinical pharmacology study (376-372) and one clinical study (376-364), through a cut-off date of 28-Mar-90. The 4-month safety update (ref. no. 6) submitted 26-Apr-91 summarized the safety data from two clinical pharmacology studies, (376-372 and 376-376) and three clinical studies (376-364, 376-369, and 376-374). Continued - see file copy. | | |
| | | M. Taylor | | | |
| B04610 | 25 | Thu, Jun 18, 1992 | Letter To: Update to Estrostep NDA Item 3 | | |
| | | S. Sobel | Re: Reference is made to our NDA (NDA 20-130) for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on 27-Dec-90. Enclosed is an update to Item 3 of the Estrostep NDA. As described in the 27-Dec-90 cover letter to the NDA, and as agreed in an 26-Oct-90 discussion with Dr. Yuan Yuan Chiu of your division, updated stability data on full production scale lots are to be submitted at the NDA. This amendment contains the 18-month stability reports for the full scale production lots and initial and 3-month results from three production scale batches using the revised drying process (Amendment 5, 21-Dec-91). Continued - see file copy. | | |
| | | S. Brennan | | | |
| B04610 | | Thu, Jun 25, 1992 | Reference to 6/19/92 meeting. | | |
| | | D. Michels | Thanking agency for meeting with us. Look forward to response regarding the status of pre-approval inspections. | | |
| | | W. Merino | | | |
| B04610 | | Thu, Jun 25, 1992 | Letter sent to Agency | | |
| | | Distribution | This attached letter was sent to the agency on 6/25/92, via Fed-X. | | |
| | | W. Merino | | | |
| B04610 | | Thu, Aug 27, 1992 | FDA Letter | | |
| | | I. Martin | Reference is made to your NDA submitted 27-Dec-90, pursuant to Section 505 (B) (1) of the FDA act for the preparation Estrostep-21 (norethindrone acetate and ethinyl estradiol tablets and ferrous fumarate tablets). We also acknowledge receipt of your additional correspondence dated 8-Feb, 28-Mar, 19-22-26-Apr, 16-May, 12-25-Jun, 22-Aug, 2-18-28-Oct, 7-26-Nov, 20-21-Dec, 1991 and 12-Feb, 13-Mar, 16-20-Apr, 5-May, 11-18-Jun, 1992. From 19-May until 9-Jul, 1992, our investigators made an inspection of your establishment at Fajardo, Puerto Rico, with respect to the applicable methods, facilities and controls, and observed a number of important departures from FDA current good manufacturing practice regulations. You were advised at that time of these deficiencies. Continued - see file copy. | | |
| | | S. Sobel | | | |

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| B04610 | 26 | Thu, Sep 03, 1992 | General Correspondence | |
| | S. Sobel | Reference is made to our NDA 20-130 for Estrostep (norethinrone acetate and ethinyl estradiol, USP) tablets for oral contraception submitted on 27-Dec-90. Additional reference is made to your letter on 27-Aug-92 that stated the application is not approvable under Section 505 (B) (1) of the act and 21 CFR 314.125(B). Reference is also made to a telephone conversation between Ms. E. Galliers and I on 25-Aug-92 regarding review of the proposed labeling and response to your then proposed 27-Aug-92 letter. In accordance with your letter and as detailed in 21 CFR 314.120 (A), we are notifying you of our intent to amend this application. Contact: | | |
| | M. Taylor | | | |

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| B04610 | 27 | Mon, Mar 08, 1993 | Amendment to Estrostep NDA Item 3 | |
| | S. Sobel | Reference is made to our pending NDA for Estrostep tabs for oral contraception submitted 27-Dec-90. Enclosed is an update to Item 3 of the Estrostep NDA. We are amending the CMC section of the NDA to provide for an additional site for analytical testing of Estrostep tabs. The alternate analytical testing site for Estrostep tabs will be W-L/P-D Pharmaceutical Research Division W-L Company 170 Tabor Road MOPS, NJ 07950 Our Fajardo, PR facility will remain the sole manufacturing site. Testing will be performed at Fajardo, PR or MOPS, NJ. Fajardo will remain responsible for release of the finished product. Continued - see file copy. | | |
| | S. Brennan | | | |

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| B04610 | | Thu, Apr 08, 1993 | Information. | |
| | I. Martin | FDA believes it is imperative to take additional steps to inform the sexually active populaton about wich contraceptives have the potential to protect against sexually transmitted diseases and which do not. | | |
| | S. Sobel | | | |

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|---------|--------------|----------------------|--|---------------|------------|
| B06850 | | Wed, Mar 02, 1994 | Validity Assessment | | |
| | | S. Jones | Reference is made to Dr. Carl Peck's letter to Mr. Melvin Goodes of September 30, 1992, regarding validity assessments for Parke-Davis products manufactured in our Vega Baja and Fajardo facilities. Reference is also made to our December 2, 1992 response to Ms. Stephanie Gray regarding the audit protocol and process. | | |
| | | | A report of the validity assessment audit performed by Lachman Consultant Services, Inc., for Estrostep® Tablets is enclosed. | | |
| | | | A number of cGMP compliance issues were raised in the report which we are addressing in our cGMP Action Plan submitted to Mr. Richard Davis on February 18, 1993 and our efforts in connection with Consent Decree activities. In addition, the consultants' report refers to a 5% manufacturing overage of Ethinyl Estradiol for the batches reviewed. This overage was mentioned in the original NDA submission (December 27, 1990, Volume 2, Page 018). | | |
| | | | The audit report will be reviewed with the manufacturing and QA/QC management of the Fajardo plant so that they are aware of the cGMP items raised in this report. | | |
| | | W. Merino | | | |
| B06850 | | Mon, Mar 04, 1996 | 2/28/96 Final Meeting Minutes | | |
| | | Distribution | Attached are final minutes from the Parke-Davis/Division of Metabolism and Endocrine Drug Products meeting held February 28, 1996. (see file copy for minutes) | | |
| | | I. Martin | | | |
| B14264 | 0 | Tue, Apr 09, 1996 | Amendment to Estrostep NDA Items 3 and 4 | | |
| | | S. Sobel | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) Tablets for oral contraception, submitted on December 27, 1990, and its amendments. Reference is also made to your nonapprovable letter of August 27, 1992 (Attachment 1), and our response of September 3, 1992 (Ref. No. 26), notifying you of our intent to amend the application. | | |
| | | | According to the August 27, 1992 letter from FDA, FDA could not verify compliance with current good manufacturing practice regulations at the Fajardo, Puerto Rico facility. In addition, FDA requested labeling revisions and reiterated our commitments for Phase 4 studies. | | |
| | | | We hereby amend our application addressing the matters described in the August 27, 1992 letter. This amendment contains revised Items 3 Chemistry, Manufacturing and Controls and 4 Samples, Methods Validation, Labeling. The Notes to Reviewer in Item 3.1 summarize the revisions made to the application. Review and archival copies of each section are provided. | | |
| | | W. Merino | | | |

SubType: NDA

CI#: 376 Sub Date: 12/27/90

Generic: Appr Date:

Product Name: Estrostep Tablets

| Barcode | Ser/ Ref# | Date To: From: | RE/ Contents/Report No./ | Report Title/ Report No. |
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| B16694 | 0 | Fri, May 24, 1996 | Amendment to Estrostep NDA | |
| | | S. Sobel | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) Tablets for oral contraception, submitted on December 27, 1990, and its amendments. Reference is also made to our April 9, 1996 NDA amendment. We are revising the labeling to remove the USP designation from the ferrous fumarate tablets. The blister card and carton for Estrostep Fe Clinic and Trade and the physician insert will be revised. | |
| | | L. Bloom | | |

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| B16694 | 0 | Wed, Jul 17, 1996 | Response to FDA Request for Information: CMC Amendment | |
| | | L. Rarick, M.D. | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) Tablets for oral contraception, submitted on December 27, 1990, and its amendments. Reference is also made to Mr. S. Koch's requests for information and new specifications during telephone conversations with Dr. L. Bloom on May 6, June 4, 11, and 18, 1996. Questions about nomenclature and the location of information in the NDA were addressed during the phone calls. This submission responds to the requests for: | |
| | | | Introduction of specifications for impurities/degradation products of ethinyl estradiol and norethindrone acetate. | |
| | | | A revised DMF authorization letter from VKW citing PVC Type 37.0 in accord with the packaging specifications. | |
| | | | Justification of the use of an ethinyl estradiol excess to account for manufacturing losses. | |
| | | | Justification of the use of an in-process test for residual alcohol levels instead of a test on the finished tablets. | |
| | | | Four copies of the method validation package, identification of the lots to be provided to FDA for method validation, and Certificates of Analysis for the method validation lots. | |
| | | L. Bloom | | |

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| B16694 | | Fri, Aug 16, 1996 | Method Validation Letter | |
| | | L. Bloom | The FDA will be performing method validation studies on Estrostep 21 and Estrostep Fe in connection with your NDA 20-130. In order to perform the necessary testing, please provide us with a sample consisting of the following: (see file copy for list) | |
| | | S. Senio | | |

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| | 0 | Mon, Sep 23, 1996 | Response to FDA Labeling Questions: CMC Amendment | |
| | | L. Rarick | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) Tablets for oral contraception, submitted on December 27, 1990 and its amendments. Reference is also made to the September 18, 1996 fax of chemistry, manufacturing and controls labeling questions and the September 18, 1996 teleconference between Dr. Helen Davies of your Division and Ms. Mary Taylor, M.P.H. and Dr. Leslie Bloom of Parke-Davis. This submission responds to each question individually. The questions are reiterated in italics for ease of reference. | |
| | | L. Bloom | | |

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SubType: NDA

CI#: 376 Sub Date: 12/27/90

Generic: Appr Date:

Product Name: Estrostep Tablets

| Barcode | Ser/ Ref# | Date To: From: | RE/ Contents/Report No./ | Report Title/ | Report No. |
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| | 30 | Wed, Oct 02, 1996 | Request for Information | | |
| | | L. Rarick | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) Tablets for oral contraception, submitted on December 27, 1990 and its amendments. Reference is also made to Ms. Kish's request in telephone conversations with Ms. Pitts on September 30, 1996 for additional copies of the proposed labeling. This submission provides for the information requested. | | |
| | | M. Taylor | | | |
| | 28 | Wed, Oct 02, 1996 | Safety Update | | |
| | | L. Rarick | Reference is made to our New Drug Application (NDA 20-130) for Estrostep® (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception, submitted on December 27, 1990, and its amendments. Reference is also made to Ms. Kish's request in a telephone conversation with Ms. Pitts on September 30, 1996 for information on a Safety Update for Estrostep. | | |
| | | M. Taylor | There have been no new clinical pharmacology or clinical studies, therefore we have no new safety information to provide since our last safety update dated June 11, 1992. | | |
| | 29 | Wed, Oct 02, 1996 | Request for Information | | |
| | | L. Rarick | Reference is made to our New Drug Application (NDA 20-130) for Estrostep (norethindrone acetate and ethinyl estradiol, USP) tablets for oral contraception, submitted on December 27, 1990, and its amendments. Additional reference is also made to the request of September 30, 1996, from Ms. C. Kish of your Division to Ms. R. Pitts of Parke-Davis for the debarment certification statement for Estrostep. | | |
| | | M. Taylor | | | |